



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1201 ELM STREET, SUITE 500
DALLAS, TX 75270

August 15, 2019

CERTIFIED MAIL 7007 3020 0000 1523 1335 RETURN RECEIPT REQUESTED

Ms. Christina Perez
EHS Manager
TM Deer Park Services Limited Partnership
Deer Park Site
P.O. Box 1914
Deer Park, TX 77536-1914

RE: TM Deer Park Services (TMDPS) Limited Partnership
Petition Reissuance Approval Decision to add WDW-422

Dear Ms. Perez:

The land disposal restrictions prohibit the injection of hazardous waste unless a petitioner can demonstrate to EPA, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the injection zone for as long as the wastes remain hazardous. The land disposal restrictions for injection wells codified in 40 CFR Part 148 provide the standards and procedures by which petitions to dispose of an otherwise prohibited waste by injection will be reviewed and by which exemptions pursuant to these petitions will be granted or denied. Part 148 also provides for the reissuance of an exemption if the reissuance complies with the above-mentioned standards.

A letter dated May 29, 2019, informed TMDPS that EPA was proposing to approve its petition reissuance request for an exemption to the land disposal restrictions. The public comment period associated with this decision began on June 19, 2019, and closed on August 12, 2019, and no comments were received.

Based on a detailed technical review of the petition reissuance request and support documents, EPA has determined that this information for the TMDPS site meets the requirements of 40 CFR Part 148 by demonstrating that, to a reasonable degree of certainty, there will be no migration of hazardous constituents from the injection zone for 10,000 years.

The following are conditions of this land disposal restrictions exemption.

Petition Reissuance Approval Conditions

This approval of a petition for reissuance of an exemption to allow the injection of restricted hazardous wastes is subject to the following conditions, which are necessary to assure that the standard in 40 CFR §148.20(a) is met. Noncompliance with any of these conditions is grounds for termination of the exemption in accordance with 40 CFR §148.24(a)(1). This exemption is applicable to the TMDPS injection wells: WDW-169, WDW-249, and WDW-422, located at its Deer Park, TX facility.

1. Injection of restricted waste shall be limited to the following injection zone and intervals:

<u>Well</u>	<u>Depth of Injection Zone</u>	<u>Injection Interval</u>	<u>Depth of Injection Interval</u>
WDW-169	4231' - 7368' ¹	Upper and Middle Frio Sands	5531' - 6670' ¹
		Lower Frio Sand	6866' - 7368' ¹
WDW-249	4250' - 7380' ²	Upper and Middle Frio Sands	5550' - 6700' ²
		Lower Frio Sand	6880' - 7380' ²
WDW-422	4250' - 7380' ³	Lower Frio Sand	6880' - 7380' ³

(¹WDW-169 depths are referenced to Kelly Bushing (KB) depths (13.4' above ground level) on WDW-169's Dresser Atlas Dual Induction Focused Log BHC Acoustilog Gamma Ray log dated 6/27/86)

(²WDW-249 depths are referenced to Kelly Bushing (KB) depths (26.5' above ground level) on WDW-249's Schlumberger Phase Induction-SFL Density Neutron Gamma Ray log dated 12/30/92 and 1/12/93)

(³WDW-422 depths are referenced to Kelly Bushing (KB) depths (19' above ground level) on WDW-422's Halliburton Array Induction Spectral Density Dual Spaced Neutron Gamma Ray Log dated 4/2/18)

2. For WDW-169, WDW-249, and WDW-422, the combined cumulative monthly volume injected into the injection intervals shall not exceed that calculated as follows:

Upper and Middle Frio Sands: (175 gpm)(1440 minutes/day)(number of days in that month)¹
 Lower Frio Sand: (450 gpm)(1440 minutes/day)(number of days in that month)

(¹The Upper and Middle Frio Sands are limited to a 2 year operational life and may not be used by TMDPS as an injection interval if they are in use as an injection interval by the offset Vopak facility. The 2017 reissuance demonstration remains in place for this reissuance, so this injection interval pertains only to WDW-169 and WDW-249)

3. The facility shall cease injection into WDW-169, WDW-249, and WDW-422 by December 31, 2030. Additionally, the Upper and Middle Frio Sands injection interval is limited to a 2 year total operational life and may not be used by TMDPS as an injection interval when the interval is in use an active injection interval by the offset Vopak facility.
4. The facility shall also cease injection into the Upper and Middle Frio Sands injection interval when a cumulative injection volume limit of 183,960,000 gallons is reached.
5. The characteristics of the injected waste stream shall for WDW-169, WDW-249, and WDW-422 shall at all times conform to those discussed in Sections 3.5 through 3.5.5.3 of the 2017 Petition Reissuance document for WDW-169 and WDW-249. The density of the waste stream injected into each interval shall remain within the range of 0.950 g/cm³ to 1.250 g/cm³ measured at 68°F and 1 atmosphere and equivalent to a specific gravity range of 0.950 to 1.250 measured at 68°F and 1 atmosphere with a reference temperature of 4°C.
6. This approval for injection is limited to the following hazardous wastes:

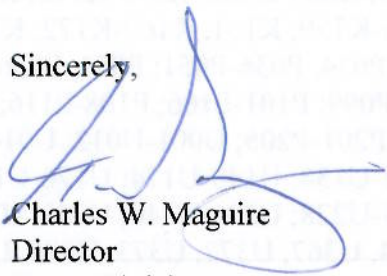
D001-D043; F001-F012; F019-F028; F032, F034, F035, F037-F039 (for constituents listed in Table 3-5.1-I of the 2017 Petition Reissuance Document); K001-K011; K013-K052; K060-K062; K069, K071, K073, K083-K088; K093-K118; K123-K126; K131, K132, K136, K141-K145; K147-K151; K156-K159; K161, K169-K172; K174-K178; K181, P001-P018; P020-P024; P026-P031; P033, P034, P036-P051; P054, P056-P060; P062-P078; P081, P082, P084, P085, P087-P089; P092-P099; P101-P106; P108-P116; P118-P123; P127, P128, P185, P188-P192; P194, P196-P199; P201-P205; U001-U012; U014-U039; U041-U053; U055-U064; U066-U099; U101-U103; U105-U138; U140-U174; U176-U194; U196, U197, U200, U201, U203-U211; U213-U223; U225-U228; U234-U240; U243, U244, U246-U249; U271, U278-U280; U328, U353, U359, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409-U411.

7. The facility must petition for approval to inject additional hazardous wastes which are not included in Condition No. 6, above. The facility must also petition for approval to increase the concentration of any waste which would necessitate the recalculation of the limiting concentration reduction factor and the extent of the waste plume. Petition reissuances and modifications should be made pursuant to 40 CFR §148.20 (e) or (f).
8. TMDPS shall annually submit to EPA the results of a bottomhole pressure survey for WDW-169, WDW-249, and WDW-422. These surveys shall be performed after shutting in each well for a period sufficient to allow the pressure in the injection interval to reach equilibrium, in accordance with 40 CFR §146.68(e)(1). The annual report should include a comparison of reservoir parameters determined from the falloff test with parameters used in the approved no migration petition reissuance. This should include a comparison of the current year's test results for the static and flowing bottomhole pressures with the values demonstrated in the approved petition reissuance and a comparison of the test results for transmissibility [Kh/μ (mD-ft/cP)] with the transmissibilities used in the approved petition reissuance demonstration for the pressure buildup and 10,000 year plume modeling.
9. TMDPS shall also annually submit to EPA a radioactive tracer survey and annulus pressure test for WDW-169, WDW-249, and WDW-422.
10. TMDPS shall notify EPA if WDW-169, WDW-249, or WDW-422 loses mechanical integrity, prior to any well work on WDW-169, WDW-249, or WDW-422, or if TMDPS plans to plug WDW-169, WDW-249, or WDW-422. If any well work or plugging is being planned, TMDPS shall also submit the procedures to EPA for review prior to commencing any work.
11. Upon the expiration, cancellation, reissuance, or modifications of the Texas Commission on Environmental Quality Underground Injection Control permit for WDW-169, WDW-249, or WDW-422, this exemption is subject to review. A new demonstration may be required if information shows that the basis for granting the exemption is no longer valid under 40 CFR §148.23 and §148.24.

In addition to the above conditions, this approval of a petition for reissuance of an exemption is contingent on the validity of the information submitted in the TMDPS petition reissuance request for an exemption to the land disposal restrictions. This reissuance decision is subject to termination when any of the conditions occur which are listed in 40 CFR §148.24, including noncompliance, misrepresentation of relevant facts, or a determination that new information shows that the basis for approval is no longer valid.

If you have any questions or comments, please call Brian Graves at (214) 665-7193 or email him at graves.brian@epa.gov.

Sincerely,


Charles W. Maguire
Director
Water Division

ecc: Mr. Frank Harris, TMDPS
Ms. Lorrie Council, TCEQ
Mr. Richard Heitzenrater, TCEQ Region 14